

BOGORODSKIY, N.V.

BOGORODSKIY, N.V., podpolkovnik meditsinskoy sluzhby

Use of "Calcex" in treating certain skin diseases. Voen.-med.shur.
no.7:83 J1 '57. (MIRA 11:1)

(SKIN--DISEASES) (CALCIUM CHLORIDE)

(HEXAMETHYLENTRIAMINE)

BOGORODSKIY, O. [Bohorodskiy, O.] kand.fiz.-matem.nauk

Address, the moon: Nauka i zhyttia 11 no.1:46-47 Ja '62.
(MIRA 15:2)

(Space research)

BOGORODSKIY, O.F. [Bohorbds'kyi, O.F.], dotsent

Why we strive to reach space. Znan. ta pratsia no. 3:16-18 Mr '61.
(MIRA 14:5)

1. Direktor Astronomicheskoy observatorii Kiyevskogo gosudarstvennogo
universiteta im. Shevchenko.
(Astrophysics)

ACC NR: AR6020761

SOURCE CODE: UR/0269/66/000/003/0038/0038

AUTHOR: Bogorodskiy, O. F.; Turchaninova, E. V.

TITLE: Investigation of the spectral energy distribution at the centers of planetary nebulae

SOURCE: Ref. zh. Astronomiya, Abs. 3.51.328

REF SOURCE: Visnyk Kyivs'k. un-tu. Ser. astron., no. 6, 1964, 3-8

TOPIC TAGS: spectral energy distribution, nebula

ABSTRACT: Various methods are considered which are used to determine temperatures at the centers of planetary nebulae. Spectral energy distribution at the centers is presented as a sequence of sections of Planck's curves corresponding to various temperatures. The spectral energy distribution is calculated for the center of nebula NGC6572. V. G. /Translation of abstract/

SUB CODE: 03

Card 1/1

UDC: 523.852.22

Bogorodskiy, O.V.
USSR/Solid State Physics - Structure of Deformable Materials. E-9

Abs Jour : Referat Zhur - Fizika, No 5, 1957, 11863

Author : Bogorodskiy, O.V., Umanskiy, Ya.S.

Inst : Moscow Institute of Steel, USSR.

Title : Change in Fine Crystalline Structure of Austenitic
Manganese Steel During Plastic Deformation.

Orig Pub : Izv. AN SSSR, ser. fiz., 1956, 20, No 6, 614-620

Abstract : The great strengthening observed in cold deformation of austenitic high-carbon steel (Hadfield steel) are explained. Hardened specimens were subjected to compression in a Gagarin press at a rate of 3 mm per minute. X-ray diffraction investigation has shown that as the degree of compression increases, one observes a rapid reduction in dimensions of the mosaic blocks and a growth in the micro-deformations of the grains. The hardness increases sharply,

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USSR/Solid State Physics - Structure of Deformation Materials.

E-9

Abs Jour : Ref Zhur - Fizika, No 5, 1957, 11863

and the lattice period of the austenite diminishes.
A decisive cause of the strengthening of manganese austenitic steel is the crumbling of the mosaic-structure blocks, due to the separation of the carbides. Also investigated was the change of the ferromagnetic properties.

Card 1/2

SALTYKOV, Sarkis Andreyevich; BOGORODSKIY, O.Ya., red.; BERLIN, Ye.N., red.
isd-va; VAYNSHTAYN, Ye.B., tekhn. red.

[Stereometric metallography] Stereometricheskaya metallografiya.
Izd. 2., perer. i dop. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry
po chernoi i tsvetnoi metallurgii, 1958. 446 p. (MIRA 11:10)
(Metallography)

SOV/48-23-5-20/31

24(2), 16(2)

AUTHOR: Bogorodskiy, O. V.

TITLE: On the Determination of the Grain Size and the Microdeformation by the Method of Harmonic Analysis (K opredeleniyu velikiny blokov i mikrodeformatsiy metodom garmonicheskogo analiza)

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1959, Vol 23, Nr 5, pp 635-636 (USSR)

ABSTRACT: The introduction to the present paper deals with the possibility of determining the distribution of the grain sizes, microdeformation, the distribution of the textural grains in the structure and their size. This possibility is offered by the application of the harmonic analysis on the intensity of the diffraction lines. The theoretical fundamentals of the harmonic analysis are then discussed and a diagram (Fig 1) shows the intensity profile of a standard and an amplified diffraction line. These are split up into Fourier series; the coefficients are determined by the aid of a diagram. Another diagram (Fig 2) shows the results obtained in this way concerning the distribution of the textural grain size.

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SOV/48-23-5-20/31

On the Determination of the Grain Size and the Microdeformation by the
Method of Harmonic Analysis

There are 2 figures and 4 references, 2 of which are Soviet.

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8/032/60/026/008/003/011
B015/B064

AUTHORS: Fomin, V. G., Bogerodskiy, O. V.

TITLE: Determination of the Degree of Microsegregation in
Germanium Silicon Alloys

PERIODICAL: Zavodskaya laboratoriya, 1960, Vol. 26, No. 8, pp. 977-979

TEXT: The degree of dendrite segregation was determined in papers of Ta. L. Mints (Ref. 1) and other authors (Refs. 2-4) from the line broadening in the X-ray picture. In this connection it was, however, omitted to consider the other factors that may also bring about a broadening of the X-ray spectrum line. In the present case, the degree of microsegregation was computed from the broadening of the diffraction lines corresponding to the glancing angles. The examinations were made on Ge-Si semiconductor alloys with a PKY (RKU) X-ray camera. A sample pulverized to 0.1 μ - 1 μ was used, the X-ray lines corresponding to the larger glancing angles were photometrically evaluated, and their width and broadening determined. The proportionality between the broadening of the X-ray line and the tangent of the glancing angle showed that the line broadening was only due to

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Determination of the Degree of Microsegregation
in Germanium - Silicon Alloys

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B015/B064

microsegregation (Fig. 2). Since the line broadening depends linearly on the composition of the Ge-Si alloy, it was possible to determine from the line broadening a deviation of the chemical composition of the sample from the average value. The minimum silicon content varied from 0 to 8 at% in the individual parts of the sample. There are 2 figures and 4 references: 3 Soviet and 1 US. ✓

ASSOCIATION: Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy
institut redkometallicheskoy promyshlennosti
(State Scientific Research and Planning Institute of the
Rare Metals Industry)

Card 2/2

86235

24.7100 1043, 1035, 1142

S/032/60/026/008/035/046/XX
B020/B052

AUTHORS: Bogorodskiy, O. V. and Shil'shteyn, S. Sh.

TITLE: Goniometer Head for X-Ray Structural Analysis by a
Double-crystal Spectrometer

PERIODICAL: Zavodskaya laboratoriya, 1960, Vol. 26, No. 8,
pp. 1012 - 1013

TEXT: The double-crystal X-ray spectrometer detects errors in the structure of single- and polycrystal samples, exactly determines the stress distribution in wide single-crystal regions, and the lattice periods of single- and polycrystal materials. The device type YPC-50M (URS-50I) used at present does not permit sufficiently rapid and exact studies. The goniometer head designed by the author (Fig.1) simplifies the fixation of the objects to be studied in a position which corresponds to the reflection of X-rays from every crystallographic plane. Thus, an accuracy of up to 0.5" is attained. The double-crystal spectrometer is attached to the device URS-50I. The first crystal is put into the clamp

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Goniometer Head for X-Ray Structural Analysis by a Double-crystal Spectrometer ⁸⁶²³⁵ S/032/60/026/008/035/046/XX B020/B052

of the monochromator, the second one into the goniometer head. The widths of the rotation curves of a natural calcite crystal (211) and a germanium single crystal (111) were determined by the above goniometer head attached to the device URS-50I (Fig.2). The theoretical width of reflection of an ideal calcite crystal is 5.8". In the given case, a width of 11" was obtained due to the insufficient quality of the crystal. The experiments showed that the band width of a germanium crystal with a dislocation density of 10^{-2} cm^{-2} is 20", and of a crystal with a dislocation density of 10^4 cm^{-2} it is 40". The rotation curves thus have two maxima which is due to the presence of blocks in the germanium single crystal, with disorientation angles of approximately 20". The theoretical width of the rotation curve of the ideal germanium crystal is 15.8". There are 2 figures and 1 non-Soviet reference: 1 German.

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83560

S/020/60/134/001/012/021
B004/B060

9.4340

AUTHORS: Bogorodskiy, O. V., Umanskiy, Ya. S., Shil'shteyn, S. Sh.

TITLE: On the Nature of the Mosaic Structure of Single Crystals
of Germanium and Silicon

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 134, No. 1,
pp. 114 - 116

TEXT: The authors wanted to check the dislocation character of the mosaic structure (Fig. 1), and studied single crystals of germanium and silicon that were drawn from the melt along the (111)-axis. The samples used were 2-3 mm thick foils cut perpendicular to the (111)-axis. It was established by etching that almost all of the dislocations exhibited the Burgers vector $a/2 (1\bar{1}0)$. In some cases, the authors observed lines which corresponded to small-angle boundaries. The density of surface dislocations was $10^2 - 10^6 \text{ cm}^{-2}$ for germanium, $10^2 - 10^3 \text{ cm}^{-2}$ for silicon. The principle of the X-ray analysis is described (Fig. 2). The monochromatic X-ray beam is reflected from the crystal I, and hits on crystal II which is rotated around small angles. The authors used the

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On the Nature of the Mosaic Structure of
Single Crystals of Germanium and Silicon

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B004/B060

УРС-50М (URS-50I) apparatus with Geiger counter. The curve of the intensity of double reflection of I as a function of the angle of rotation β is defined as rotation curve. The authors constructed a special goniometer head which allowed rotations around small angles with an accuracy of 0.5". The rotation curves obtained experimentally are shown in Fig.3. the data are given in Table 1. The distances between the maxima equal the disorientation angle of the crystal blocks. Experimental data show that the Ge single crystals have a mosaic structure with all dislocation densities, while the disorientation angles of the blocks change little, although the dislocation densities differ by four orders of magnitude. This cannot be explained by the Burgers model. In silicon, the blocks are considerably smaller, which likewise contradicts the Burgers model, since the lattice constants of Ge and Si are little different. The germanium crystals with small-angle boundary showed fragment structure. The authors arrived at the conclusion that the block boundaries in Ge and Si may be connected with dislocations, but not according to the mechanism of the small-angle boundary. Also structural defects might play a role here. The interfaces between the fragments, on the other hand, consist of dislocations in agreement with the

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On the Nature of the Mosaic Structure of
Single Crystals of Germanium and Silicon

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B004/B060

Burgers model. Thus, the nature of the block- and-fragment boundaries
is different. There are 3 figures, 1 table, and 5 references: 2 Soviet,
1 US, and 1 German. X

ASSOCIATION: Moskovskiy institut stali im. I. V. Stalina (Moscow
Steel Institute imeni I. V. Stalin)

PRESENTED: April 26, 1960, by P. A. Rebinder, Academician

SUBMITTED: March 2, 1960

Card 3/3

20026

24.7700 1143, 1150, 1151
18.9200 1418, 1445, 1454

S/070/61/006/001/004/011
E032/E514

AUTHORS: Bogorodskiy, O. V., Nashel'skiy, A.Ya. and Ostrovskaya, V.Z.

TITLE: X-ray Study of the Solid Solutions InAs-InP

PERIODICAL: Kristallografiya, 1961, Vol.6, No.1, pp.119-121

TEXT: The basic materials employed were 99.999% pure indium (brand UM-O (In-O)), 99.99% pure crystalline arsenic and 99.99% pure red phosphorus "used for semiconductors of class A2". The alloys were prepared with the aid of a special furnace shown in Fig.2. The furnace consisted of two parts. The left-hand part was maintained at a high temperature and contained indium in a quartz boat, while the right-hand part was kept at a lower temperature and contained phosphorus and arsenic. This procedure has been described by the second of the present authors in Ref.5. The alloys thus obtained were subjected to zone recrystallization as described by O. G. Folberth and H. Weiss (Ref.6). Chemical analysis of the specimens was not carried out. The composition was checked by comparing the weights of the elements loaded into the ampoule and the solid solution obtained in the end. The specimens were ground in an agate mortar until the average particle size was about 0.01 mm.

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X

X-ray Study of the Solid

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E032/E514

The X-ray photographs were obtained by the Debye method, using copper radiation in the PKY (RKU) camera (86 mm in diameter). The X-ray photographs were measured up on the IZA-2 (IZA-2) comparator. The lattice parameters were calculated from the 642 and 731 reflections. The table shows the lattice parameters obtained.

Table

Lattice parameters of solid solutions of the
InAs-InP system

Composition, mol.%		Lattice period, Å		Present data
InAs	InP	Folberth (Ref.1)	Koster and Ulrich (Ref.4)	
100	0	6.04	6.06	6.042±0.001
95	5	-	-	6.034
90	10	-	-	6.026
80	20	-	-	6.016
75	25	5.99	6.02	-
60	40	-	-	5.960
50	50	5.93	5.96	5.935
40	60	-	-	5.910
30	70	-	-	5.892

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(Table cont.)

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X-ray Study of the Solid

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E032/E514

Table cont.

Composition, mol.%		Lattice period, Å		
InAs	InP	Folberth (Ref.1)	Koster and Ulrich (Ref.4)	Present data
25	75	5.89	5.92	-
20	80	-	-	5.876
10	90	-	-	5.857
0	100	5.86	5.88	5.860

Fig.4 shows the dependence of the width of the diffraction lines and the physical broadening (micro-liquidation effect) on the composition after zone equalization. The physical broadening was calculated from the formula

$$\beta = \sqrt{B^2 - b^2}$$

where B is the width of the broadened line and b is the width of a standard line for InAs. There are 4 figures, 1 table and 8 references: 3 Soviet and 5 non-Soviet.

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X-ray Study of the Solid

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E032/E514

ASSOCIATION: Gosudarstvennyy nauchno-issledovatel'skiy i
proyektnyy institut redkometallicheskey promyshlennosti
(State Scientific Research and Project Institute of
the Rare Metal Industry)

SUBMITTED: July 15, 1960

Fig. 2

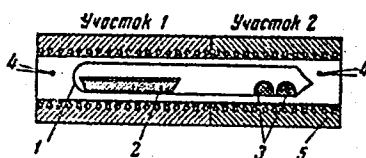


Рис. 2

Fig. 4

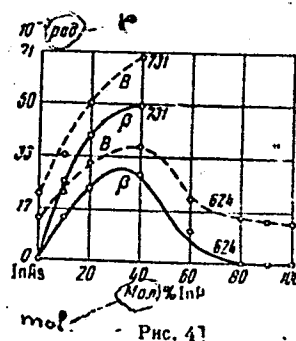


Рис. 4

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FOMIN, V.G.; OVODOVA, A.V.; BOGORODSKIY, O.V.; SHIL'SHTEYN, S.Sh.

Some features of the crystallization of germanium-silicon alloys
in zone melting. Kristallografiia 6 no.2:256-260 Mr-Ap '61.
(MIRA 14:9)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proektnyy institut
redkometallicheskey promyshlennosti.
(Germanium-silicon alloys) (Dislocations in crystals)
(Melting)

FOMIN, V.G.; BOGORODSKIY, O.V.

Investigation of microliquefaction in the crystallization of
germanium-silicon alloys. Kristallografiya 6 no.3:455-459
My-Je '61. (MIRA 14.8)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy in-
stitut redkometallicheskoj promyshlennosti.
(Germanium--Silicon alloys) (Crystallization)

1. BOGORODSKIY, P. A.
2. USSR (600)
4. Stock and Stockbreeding--Yaroslavl' Province
7. Highly productive animals in Yaroslavl' Province, Sots. zhiv.,
15, No. 1, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April, 1953, Uncl.

BOGORODSKIY, S.M.; KRAVCHUK, V.N.; CHERNYAKHOVSKIY, A.G.

Lower-Middle Miocene eluvium in the Ust-Urt. Kora vyvetr.
no.5:371-373 '63. (MIRA 16:7)

1. Vsesoyuznyy aerologicheskiy trest.
(Ust-Urt—Weathering)

BOGORODSKIY, V.

~~Centrifugal machine with hydraulic push rod. Mor.i tech.flot 14 no.3:~~
22-24 Mr '54. (MLRA 7:5)

1. Glavnyy inzhener Gorodetskogo mekhanicheskogo zavoda.
(Metal cladding)

BOGORODSKIY, V., kand.tekhn.nauk; DOBROTIN, D., nauchnyy sotrudnik

Ultrasonic pulse gauge for thickness measurement in products control.
Mor.flot 21 no.5:29-31 My '61. (MIRA 14:5)

1. Nachal'nik Gidroakusticheskoy laboratorii Arkticheskogo i Antarkticheskogo nauchno-issledovatel'skogo instituta (for Bogorodskiy).
2. Gidroakusticheskaya laboratoriya Arkticheskogo i Antarkticheskogo nauchno-issledovatel'skogo instituta (for Dobrotin).
(Ships—Maintenance and repair)
(Ultrasonic testing)

S/194/61/000/012/078/097
D273/D301

AUTHORS: Bogorodskiy, V. and Dobrotin, D.

TITLE: Ultrasonic pulse thickness gauge for component control

PERIODICAL: Referativnyy zhurnal, Avtomatika i radioelektronika,
no. 12, 1961, 22, abstract 12E119. ("Morsk. flot" 1961,
no. 5, 29-31)

TEXT: A detailed description is given of a portable instrument
УЗТИ-3 (UZTI-3) designed for determining the thickness of components
with rough or corroded surfaces in the range of thicknesses from
5 to 60 mm. Schematic and principle diagrams of the instrument are
presented and also a stress diagram at various points of the de-
sign. The instrument uses an ЭЛТ (ELT) /-Abstractor's note: Elec-
tron-beam tube 7. Pulses of 1.5 microsecond duration are used. At
a distance between two consecutive reflected pulses, the thickness
of the component is determined. The instrument is provided with a
piezo-probe with a magnetic holder. The instrument worked success-
✓
-

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Ultrasonic pulse thickness...

S/194/61/000/012/078/097
D273/D301

fully during experimental trials, and also in determining layers
and fractures in pipes. [Abstractor's note: Complete translation.]

Card 2/2

BOGORODSKIY, V.V.

Modern physical methods for measuring the thickness of sea ice.
Okeanologiya 3 no,4:720-730 '63. (MIRA 16:11)

1. Arkticheskiy i Antarkticheskiy nauchno-issledovatel'skiy
institut, g. Leningrad.

24(1)

SOV/112-59-2-4042

Translation from: Referativnyy zhurnal. Elektrotehnika, 1959, Nr 2, p 263 (USSR)

AUTHOR: Bogorodskiy, V. V.

TITLE: Ultrasonic Method for Determining Thickness of Ice
(Ul'trazvukovoy metod opredeleniya tolshchiny l'dov)

PERIODICAL: V sb.: Probl Arktiki, Nr 4, L. "Morsk. transport," 1958. pp 65-77

ABSTRACT: First experiments have been conducted in the ultrasonic investigation of physical properties of ice cover and ice thickness in fresh-water reservoirs and seas. The ultrasonic method proved to be better than other known methods (acoustical, vertical electric sounding, seismic-acoustical, capacitive). A theoretical investigation is confronted with difficulties due to textural and structural peculiarities of the ice cover, as well as to dependence of the ice properties on the composition of the water which created the ice. In determining the damping factor of ultrasonic propagation in ice, the ice thickness should be divided into two regions: (1) isotropic where the ultrasonic

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SOV/112-59-2-4042

Ultrasonic Method for Determining Thickness of Ice

wavelength is longer than the average dimension of the crystals; (2) anisotropic where the reverse relation holds true. In each of the above regions, the mechanism of dissipation and absorption of ultrasonic waves has its own peculiarities. No attempt to evaluate the damping factor quantitatively has been made as there is no data on the elasticity moduli of the ice crystal and their temperature dependence; also the heat conductance and the heat capacity of ocean ice are only approximately known. The author, in cooperation with Z. I. Shvayshteyn, has used the supersonic method in determining ice thickness on the Neva River and Ladoga Lake. Earlier, the velocity of ultrasonic propagation in ice at -5°C up to -20°C for ocean ice and at 0°C up to -25°C for fresh-water ice was measured. It has been found that the maximum relative error in measuring ice thickness up to 1 meter by the ultrasonic method is about 5%. The method permits measuring (with the vibrator frequency 500 kc) the ice thickness up to 2 meters (with an error of 5-7%). The method was used

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SOV/112-59-2-4042

Ultrasonic Method for Determining Thickness of Ice

at the drifting station "Severnny polyus-4." With the 500-kc frequency and an acoustic pulse power of 150-200 w, the maximum ice thickness that can be determined is 0.8-1.0 m. This limit can be raised if the frequency is lowered and the ultrasonic power increased.

B.V.A.

Card 3/3

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 11, p 38 (USSR) SOV/124-58-11-12230

AUTHORS: Bogorodskiy, V. V., Gusev, A. V.

TITLE: - Use of Ultrasonic Vibrations in Hydrological Investigations
(Primeneniye ul'trazvukovykh kolebaniy dlya gidrologicheskikh issledovaniy)

PERIODICAL: V sb.: Probl. Arktiki. Nr 3. Leningrad, "Morsk. transport", 1958, pp 69-78

ABSTRACR: Described briefly are several methods for determining the speed of sound in liquids: the interferometer method, the pulse method, and the phase method. To eliminate the factor of ambiguity from results obtained when the phase method is used to determine the speed of sound in the sea, the authors propose a combination pulse-phase method. A short account is given also of a phase-type gage for measuring the speed of currents. The authors recommend that ultrasonic-wave methods be used, for example, to study the underside of ice covers and for other types of hydrological investigation.
L. K. Zarembo

Card 1/1

AUTHOR: Bogorodskiy, V. V.

46-4-1-3/23

TITLE: Elastic Properties of Ice. (Uprugiye kharakteristiki l'da.)

PERIODICAL: Akusticheskiy Zhurnal, 1958, Vol.IV, Nr.1.
pp.19-23. (USSR)

ABSTRACT: An ultrasonic pulse method was used to determine elastic constants of polycrystalline ice. The circuit used is shown schematically in Fig.1. A primary generator 1 is connected to a display generator 2 and a pulse generator 3. The pulse generator excites a piezoelectric transducer 4, which emits an acoustic pulse into the sample studied. After passing through a known distance in ice the pulse excites a piezoelectric receiver 5. A signal from the receiver is passed through an amplifier 6, a detector 7, and then it is displayed on a cathode ray oscilloscope 8. To measure the time interval between the emission and reception of an acoustic pulse, the oscilloscope display is calibrated by means of an electronic device 9. The apparatus is calibrated by means of a standard acoustic line shown in Fig.2. Excitation of longitudinal waves in ice was produced using barium

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46-4-1.3/23

Elastic Properties of Ice.

titanate plates and shear waves were excited by means of quartz vibrators with a Y-cut. All piezoelectric transducers had a resonance frequency of 500 kc/s. Both the longitudinal and shear wave velocities could be measured simultaneously, and from these velocities the values of all elastic constants of an ice layer up to 2 m thick could be found. The first series of measurements was carried out in the author's laboratory using ice blocks 60x60x100 cm in size. Other measurements were made on the ice cover of the Ladoga Lake. Fig.3 shows the dependence of the velocities of the longitudinal and shear waves on the temperature (zero to -25°C) and density of fresh-water ice. A practically linear dependence of the elastic wave velocities on temperature was obtained. Fig.4 gives the dependence of the Young's modulus ($6-10 \times 10^4 \text{ kg/cm}^2$) and shear modulus ($2-4 \times 10^4 \text{ kg/cm}^2$) on the temperature and density of fresh-water ice. The values of the Poisson's ratio (of the order of 0.34) are given in Table 1. Similar measurements were made for sea-water ice. These measurements were carried out in 1955 by

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Elastic Properties of Ice.

46-4 -1-5/23

a drifting Polar station SP-4. The results for sea-water ice are given in Table 2. There are 4 figures, 2 tables and 4 references, of which 1 is Soviet, 1 German, 1 American and 1 a translation of a Western work into Russian.

ASSOCIATION: Arctic Scientific Research Institute, Leningrad
(Arkticheskiy nauchno-issledovatel'skiy institut, Leningrad.)

SUBMITTED: February 3, 1957.

1. Ice—Elastic properties

Card 3/3

9.9000, 24.2130, 24.7800

77333
SOV/57-30-1-12/18

AUTHORS: Rudakov, V. N., Bogorodskiy, V. V.

TITLE: Measurements of Glacier Thickness by Electromagnetic Methods

PERIODICAL: Zhurnal tekhnicheskoy fiziki, 1960, Vol 30, Nr 1, pp 82-89 (USSR)

ABSTRACT: The problem arose during measurements of ice layers in the Antartic as a part of the International Geophysical Year program. Gravimetric and magnetometric methods are only relative while the seismic methods are impractical due to a thick damping layer of snow. The authors discuss, therefore, the possibility of using retarded, reflected electromagnetic signals. (1) Electromagnetic properties and the structure of ice: The authors review the data about the dielectric permittivity ϵ and the $\tan \delta$ of the angle of electrical losses in the dielectric obtained by Eder (Ann. d. Phys., I, 7-8, 381-398, 1947). They compare them to those computed using the Debye equation

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Measurements of Glacier Thickness by
Electromagnetic Methods

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SOV/57-30-1-12/18

$$\epsilon = \frac{\epsilon_0 + \epsilon_\infty x^2}{1 + x^2}, \quad (1)$$

$$\epsilon_1 = \epsilon \tan \delta = \frac{\epsilon_0 - \epsilon_\infty}{1 + x^2} x, \quad (2)$$

where

$$x = \frac{f}{f_0}, \quad (3)$$

Here ϵ_0 is value of ϵ at $f = 0$; ϵ_∞ is value of ϵ at optical frequencies (up to the start of electronic dispersion); f_0 is frequency at which ϵ_1 reaches its maximum value. Taking the values of the constants from the work by Eder, the authors computed Table A. Assuming a linear temperature change in the deeper layers of the ice,

$$t_z^* = t_h^* - b(h - z), \quad (5)$$

where z is the coordinate perpendicular to the glacier;
 t_h^0 is temperature of the earth beneath; b is temperature

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Measurements of Glacier Thickness by
Electromagnetic Methods

77333
SOV/57-30-1-12/18

Table A

Dielectric permittivity and the tangent of the angle
of electric losses of insipid ice at $t = -100^\circ \text{C}$

(a) Frequency f , cycles; (b) computed using the
Debye equation; (c) experimental data by Eder;
(d) experiments data by Pasynkov, Rudakov, and
Kholuyanov.

a	b		c		d	
	f	$\tan \delta$	f	$\tan \delta$	f	$\tan \delta$
0	80.0	0.000	—	—	—	—
10	80.0	0.004	—	—	—	—
10 ²	80.0	0.041	80.0	0.167	—	—
10 ³	68.0	0.410	64.3	0.695	—	—
10 ⁴	6.2	2.800	11.0	2.195	—	—
10 ⁵	2.0	0.850	2.0	0.721	3.2	0.600
10 ⁶	2.0	0.086	2.0	0.222	2.0	0.140
10 ⁷	2.0	0.009	—	—	2.0	0.014
10 ⁸	2.0	$9 \cdot 10^{-4}$	—	—	2.0	—
10 ⁹	2.0	$9 \cdot 10^{-5}$	—	—	—	—
10 ¹⁰	2.0	$9 \cdot 10^{-6}$	—	—	2.0	—

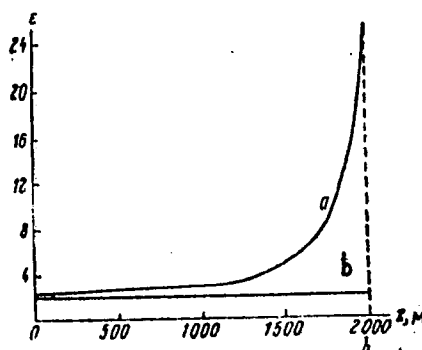
Card 3/8

Measurements of Glacier Thickness by
Electromagnetic Methods

77333
SOV/57-30-1-12/18

gradient. Taking $b = 0.02 \text{ deg/m}$ and $t = -3^\circ \text{ C}$, they calculated the relationship between the dielectric permittivity and the distance from the surface of the glacier (see Fig. 3).

Fig. 3. Dielectric permittivity of the glacier vs distance from the surface of the glacier: (a) at $f = 10^4$ cycles; (b) at $f = 10^8$ cycles; h is the glacier thickness.



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Measurements of Glacier Thickness by
Electromagnetic Methods

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The authors also note that the ice at 8 to 10 m under the surface of the glacier is made mostly out of crystals of 1-2 cm size. No data are available for greater depths. Electromagnetic investigations of ice crystals were made only in the region of light waves.
(2) Propagation of electromagnetic waves in ice: Since $\tan \delta \neq 0$, permittivity of ice has to be complex:

$$\epsilon = \epsilon' - j\epsilon'' = \epsilon'(1 - j \tan \delta). \quad (7)$$

Using Maxwell's equations, the authors obtain an equation for the electric vector E ($E = \text{b.f.}$)

$$\Delta E + \frac{\omega^2}{c^2} \epsilon E + \text{grad} \left(E \frac{1}{\epsilon} \text{grad} \epsilon \right) = 0. \quad (9)$$

Assuming a slow variation of ϵ and taking the wave propagation to be along the z axis, the solution can be obtained in the simplified form

$$E(z) = \frac{A}{p} e^{-\int_0^z k(z) dz} - j \left\{ \int_0^z k(z) dz - \pi/2 \right\}. \quad (16)$$

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Measurements of Glacier Thickness by
Electromagnetic Methods

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where

$$\left. \begin{aligned} \rho &= \sqrt{a^2 + \beta^2} \\ \operatorname{tg} \varphi &= \frac{\beta}{a} \end{aligned} \right\} \quad (17)$$

and where ω in Eq. (9) was first substituted by k

$$k(x, y, z) = \frac{\omega}{c} \sqrt{\epsilon(x, y, z)}, \quad (11)$$

and then k was written in a complex form

$$k(z) = \alpha(z) - j\beta(z), \quad (13)$$

For the time of return of the signal at high frequencies and sufficiently low temperatures, the authors derive an approximate equation $\tau = \frac{2nh}{c}$. (19)

where n is index of refraction. For $h = 2$ Km; $n \approx \sqrt{\epsilon} = \sqrt{2}$, τ comes out to be 18.9 μ sec. There exists one kind of damping due to absorption by ice. An approximate equation at high frequencies is

$$Ndb_1 = 8.65 \frac{\omega}{c} \sqrt{\epsilon} h \operatorname{tg} \delta, \quad (22)$$

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Measurements of Glacier Thickness by
Electromagnetic Methods

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SOV/57-30-1-12/18

where Ndb_1 denotes the number of decibels. For
 $r > 10^6$ cycles, $\tan \delta \sim 1/\omega$, and $n = \text{const}$, so
that for $h = 2$ Km, $Ndb_1 \approx 40.8$ db. The scattering
contributes another damping given by

$$Vdb_2 = \frac{20h}{\sqrt{V}} \lg \frac{1}{1-\sigma}, \quad (23)$$

where

$$\sigma = \frac{8\pi |a|^2 \omega^4 V^2}{3c^4} \quad (24)$$

is the effective cross section of scattering, and V
is the volume of single crystals. As is known,

$$a = \frac{3}{4\pi} \frac{s-1}{s+2}, \quad (25)$$

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Measurements of Glacier Thickness by
Electromagnetic Methods

77333
SOV/57-30-1-12/18

Assuming $V = 1 \text{ cm}^3$, $Ndb_2 \approx 0.01 \text{ db}$ at $f = 10^8$ cycles, but increases rapidly to $Ndb_2 \approx 100$ for $f = 10^9$ cycles. The authors discuss other contributions to the damping (partial reflection on the air-ice or air-snow surface, non-mirror reflection from the ice-ground surface, waves not being plane) and conclude that for $\lambda = 1 \text{ m}$ wavelength, the damping does not exceed 100 db. With a 10-kw generator one needs a receive of 1μ volt sensitivity and a $0.1\text{-}\mu$ sec impulse sequence with pauses larger than 40μ sec, which is all technically feasible. The authors note that the effects discussed in the present paper are probably the cause of 100 to 120 m altimeter readings in airplanes landing on glaciers of that approximate thickness. The authors conclude that there probably exists a possibility of using highly directional millimeter waves, but that one first needs experimental investigations of scattering of such waves in ice. There are 4 figures; 1 table; and 6 references, 4 Soviet, 1 German.

SUBMITTED:
Card 8/8

July 4, 1958

43203

S/046/62/008/004/003/017
B108/B186

24.1800

AUTHORS: Bogorodskiy, V. V., Romanov, V. N.

TITLE: Relief-capacitance technique of measuring the intensity of ultrasound

PERIODICAL: Akusticheskiy zhurnal, v. 8, no. 4, 1962, 415-419

TEXT: A possibility of measuring the intensity of ultrasound is discussed. The pressure of ultrasound and some minor factors will produce a relief on the free surface of a liquid or on the interface between two immiscible liquids. The height of this relief depends monotonically on the intensity of the ultrasound. The free surface or interface can therefore be used as one electrode of a measurement cell serving as a capacitor, the capacitance changing with the height of the relief. It was verified in experiments that the height of the relief is directly proportional to the intensity of the ultrasound. The error does not exceed 15-20%. Measurements with the relief-capacitance technique, in which a plane electrode was placed above the free surface of the liquid, showed that at high intensities the relief height increases more slowly than expected in proportion to the intensity.

Card 1/2

Relief-capacitance technique of...

S/046/62/008/004/003/017
B108/B186

This is due to a higher absorption resulting from the distortion of the shape of the wave. Capacitor cells with two liquids are more suitable for intensity measurements, since the reflected ultrasound does not interfere as much as in free-surface-liquid cells. There are 8 figures. ✓

ASSOCIATION: Arkticheskii i antarkticheskii n.-i. institut, Leningrad
(Arctic and Antarctic Scientific Research Institute, Leningrad)

SUBMITTED: July 26, 1960

Card 2/2

BOGORODSKIY, V.V.; RUDAKOV, V.N.

Electromagnetic methods for determining the thickness of
floating ice. Zhur.tekh.fiz. 32 no.7:874-882 J1 '62.

(MIRA 15:8)

(Electromagnetic waves)

(Ice)

S/046/63/009/001/021/026
B104/B186

AUTHORS: Bogorodskiy, V. V., Dobrotin, D. D.

TITLE: Some results of an investigation into the physical and mechanical properties of the snow cover

PERIODICAL: Akusticheskiy zhurnal, v. 9, no. 1, 1963, 115 - 116

TEXT: The physical and mechanical properties of arctic snow were determined at the drifting polar station C1-10 (SP-10) during April - May 1962. Using an ultrasound pulse method, the velocities of longitudinal and transverse waves were determined from the snow cover and from samples of different densities. Measurements were carried out in horizontal and vertical directions both in the snow cover and in samples. Results: Young's modulus and the velocities of the waves determined from the samples increase monotonically with density and show no great difference whether the snow is investigated in horizontal or in vertical direction. The velocities determined in the snow cover in vertical direction are greater by a factor of 2 than those determined in horizontal direction. These results can be explained by the effects of recrystallization. There are 1 figure and 1 table.

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Some results of an investigation...

S/046/63/009/001/021/026
B104/B186

ASSOCIATION: Arkticheskiy and antarkticheskiy n.-i. institut, Leningrad
(Arctic and Antarctic Scientific Research Institute, Leningrad)

SUBMITTED: July 25, 1962

Card 2/2

BOGORODSKIY, V.V.; DOBROTIN, D.D.; KHOKHLOV, G.P.

Ultrasonic thickness gauge for controlling corroded surfaces.

Zav. lab. 29 no.10:1254-1258 '63.

(MIRA 16:12)

1. Arkticheskiy i antarkticheskiy nauchno-issledovatel'skiy
institut Ministerstva morskogo flota.

BOGORODSKIY, V.V.

Elastic moduli of ice crystals. Akust. zhur. 10 no.2:152-155
'64. (MIRA 17:6)

1. Arkticheskiy i antarkkticheskiy nauchno-issledovatel'skiy
institut, Leningrad.

L 54773-65 EEC-2/ENT(1)/EEC(t)/EED-2 Pm-4/Pn-4/Pac-4/Pi-4/Pk-4/Pt-4

GR/WR

ACCESSION NR: AF5015642

UR/0057/65/035/006/1150/1153

AUTHOR: Bogorodskiy, V.V.; Rudakov, V.N.; Tyul'pin, V.A.

TITLE: Electromagnetic probing of the antarctic ice cap

SOURCE: Zhurnal tekhnicheskoy fiziki, v.35, no.6, 1965, 1150-1153

TOPIC TAGS: radar, ice, thickness gage

ABSTRACT: The authors briefly discuss the deficiencies of the seismic method for measuring the thickness of the antarctic ice cap and the desirability of developing a radar method that would ultimately permit continuous surveys to be made from aircraft. The authors describe a test performed early in 1964 on the 31 km range of the Vitynyy observatory and the Pionerskaya station in the antarctic with a standard Gyuyg-1M4²⁴ radar set operating at a wavelength of 1.43 m with a pulse power of 80 kW and a 44° antenna pattern. The apparatus was mounted on a tractor sledge, the antenna was laid directly on the snow, and the position was determined within 500 m. A strong reflection was received corresponding to an ice cap thickness of 850 m;

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ACCESSION NR: AP5015642

this is to be compared with the thickness of 900 m determined seismically for the ice cap in this region. The measured attenuation was approximately 150 db; this is considered to be in good agreement with the attenuation of 117 to 120 db calculated on the basis of the theory of V.V.Bogorodskiy and V.N.Rudakov (ZhTF 30,82,1960). During movement of the apparatus to another location an accident occurred which terminated the tests. It is concluded that the theory of Bogorodskiy and Rudakov has been confirmed. The American group of A. H.Waite, who succeeded in making measurements at three locations, obtained similar results. "In conclusion, the authors consider it their pleasant duty to express their gratitude to the honored scientist and engineer Professor N.P.Bogorodskiy for assistance in performing the work." Orig.art.has: 2 formulas and 1 figure.

Cord 2/3

L 54773-65

ACCESSION NR: AP5015642

ASSOCIATION: Arkticheskiy i antarkticheskiy nauchno-issledovatel'-
skiy institut, Leningrad (Arctic and Antarctic Scientific Research
Institute)

SUBMITTED: 12Aug64

ENCL: 00

SUB CODE: ES, DC

NR REF SOV: 003

OTHER: 000

AR
Card 3/3

BOGORODSKIY, V.V., red.

[Use of radiophysical methods in oceanographic and ice research] Primenenie radiofizicheskikh metodov v okeanograficheskikh i ledovykh issledovaniyakh. Leningrad, 1965. 106 p. (MIRA 18:12)

1. Leningrad. Arkticheskiy i antarkticheskiy nauchno-issledovatel'skiy institut.

ACC NR: AP6020993

(N)

SOURCE CODE: UR/0213/66/006/003/0551/0552

AUTHOR: Tsurikov, V. L.; Bogorodskiy, V. V.

ORG: none

TITLE: Conference on physical investigation methods of world's ocean waters and sea and continental ice

SOURCE: Okeanologiya, v. 6, no. 3, 1966, 551-552

TOPIC TAGS: oceanographic conference, ~~geologic conference~~, geophysic conference, ~~meteorologic conference~~ SEA ICE, ELECTRIC PROPERTY

ABSTRACT: The Second Interdepartmental Conference on the Use of Radiophysical Methods in Oceanographic and Ice Investigations took place on 14-18 December 1965 in Leningrad. The conference was organized by the Arctic and Antarctic Scientific Research Institute, according to a resolution of the Main Administration of the Hydrometeorologic Service. More than 350 persons from 56 organizations participated. Problems on the use of radiophysical investigation methods and problems concerning the electrical properties of sea ice were discussed in two sections and presented in 58 papers.

SUB CODE: 08/ SUBM DATE: none

Card 1/1

ACC NR: AP70001/3

(A)

SOURCE CODE: UR/0046/66/012/004/0411/0415

AUTHORS: Bogorodskiy, V. V.; Galkin, Yo. I.

ORG: Arctic and Antarctic Research Institute, Leningrad (Arkticheskiy i antarkticheskiy n.-i. institut)

TITLE: Investigation of the internal friction of ice plates with a layer of snow during bending vibrations

SOURCE: Akusticheskiy zhurnal, v. 12, no. 4, 1966, 411-415

TOPIC TAGS: ice, snow, vibration analysis, friction

ABSTRACT: The internal friction of homogeneous ice plates with a surface snow layer was investigated during bending vibrations in the temperature region from 0 to -20C. The values for the logarithmic decrement Δ , coefficient of loss ξ , and the energy absorption coefficient ψ were determined. The determination is based on the well-known expression for the eigenfrequencies of bending vibrations of plates

$$\omega_n = \frac{\pi^2 (2n-1)^2 \sqrt{Eh^2}}{4n^2 \sqrt{12\rho_0(1-\nu)^2}}$$

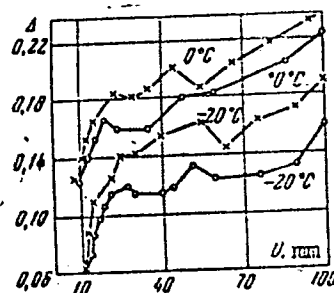
and the experimental data of V. V. Bogorodskiy (Üprugiye kharakteristiki l'da. Akust.

Card 1/2

UDC: 534.29+539.67:551.322

ACC NR: AP7000143

Fig. 1. Logarithmic decrement Δ as a function of the temperature and amplitude of vibration



zh., 1958, 4, 19—23). Numerical values for Δ , ξ , and ψ were determined with an experimental installation consisting of a vibrator, sound receiver, and oscill-graph. The experimental results are summarized in graphs and tables (see Fig. 1). It was found that the loss of mechanical energy in nonhomogeneous ice plates depends on the amplitude of vibration and the temperature. The inner friction of ice is increased considerably by a surface snow layer, especially if the thickness of the latter exceeds one half the thickness of the ice plate. The authors thank V. N. Krasil'nikov for his valuable advice. Orig. art. has: 1 table, 6 graphs, and 10 equations.

SUB CODE: 20, 04/ SUBM DATE: 20Jul64/ ORIG REF: 001

Card 2/2

BOGORODSKIY, Ye.S.; SUSHKIN, V.S.

Mechanization of assembling operations at the "Tizpribor" Plant.
Priborostroenie no.2:22-23 F '62. (MIRA 15:2)
(Instrument manufacture)

1,11(0

2708,1573

21094

S/135/61/000/005/006/011
A006/A101

AUTHORS: Bykhovskiy, D. G., Bogorodskiy, Yu. A., Engineers

TITLE: Gas electric cutting of metal plates

PERIODICAL: Svarochnoye proizvodstvo, no. 5, 1961, 16 - 18

TEXT: The mechanized gas-electric cutting of over 100 mm thick non-ferrous metals and stainless steel was for the first time in the world practice achieved with the aid of equipment developed by VNIIESO, including an arc cutting torch, a power supply source for the electric arc and a control system. Pouring channels of 100 x 100 mm section can now be cut off cast-iron, silumin, copper and copper alloy castings with satisfactory quality of the edges. The advantages of the new equipment are: greater thickness of the material to be cut, higher cutting speed, lower gas and electric power consumption. Cutting is performed with an arc burning in the gas flow between a tungsten electrode and the work piece. The cutting process has the following technological peculiarities: independence of the arc current on the thickness of the cut metal; correlation of the thickness of cut metal and arc voltage; the cutting process has to be conducted at initial and operational speed. A formula is given showing the dependence be-

X

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Gas electric cutting of metal plates

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S/135/61/000/005/006/011
A006/A101

X

tween the thickness of the material and the arc voltage: $U_{arc} = \frac{A}{S} + B \cdot \lg S$, where U_{arc} is the arc voltage in v; S is the thickness of the plate in mm, A and B are the coefficients depending on the composition and rate of the gas feed and on the nozzle diameter of the arc torch. The narrow range of regulating the operational current and the relatively wide range of changes in the arc voltage are specific peculiarities of gas-electric cutting, requiring new ways of considering the problem concerning the electric arc power supply source. Investigations carried out in this direction proved that the most efficient power supply source is a rectifier on semi-conductor valves and an improved control stray transformer. This power source is efficient, light, small-sized, simple and reliable. VNIIESO developed moreover a power source on the basis of multiampere selenium rectifiers assembled by a three-phase push-pull circuit with 270 v idle-run voltage and stable burning of the arc up to 450 amp current; and a power source with ignitron rectifiers. Metallic ignitrons И-70/0.08 (I-70/0.08) and И-140/0.8 (I-140/0.8) assembled by various systems were investigated, including a three-phase push-pull and a six-phase single-cycle circuit (Figure 3). The main deficiency of ignitron rectifiers is the need of a ballast rheostat. Therefore, they will remain in use only until series production of sufficiently cheap silicon rectifiers will be organized. The new type arc-cutting torches present a series of advantages, such as satisfactory centering of the electrode in respect to the nozzle; reliable

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Gas electric cutting of metal plates

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A006/A101

electric insulation of the electrode and the nozzle; hermetic nozzle cooling system, intensified cooling and simple nozzle design. The T-2 arc torch (Figure 4) consists of two silumin castings containing the adapter with the electrode and the nozzle. The insulation of the nozzle and the electrode is achieved by the use of epoxy resin. Furthermore the possibility was studied of using high-temperature fluoroplastic and super-poreelain insulators for arc torches. The development of the described equipment makes it possible to consider the centralized cutting of sheet material so that savings of scarce metal and a reduction of preparatory operation costs will be achieved, and a great number of metal cutting mills will be liberated which presently are needed for mechanical cutting of metals unsuitable for oxygen cutting process. There are 1 table, 5 figures, 7 references 4 Soviet and 3 non-Soviet. X

ASSOCIATION: VNIIESO

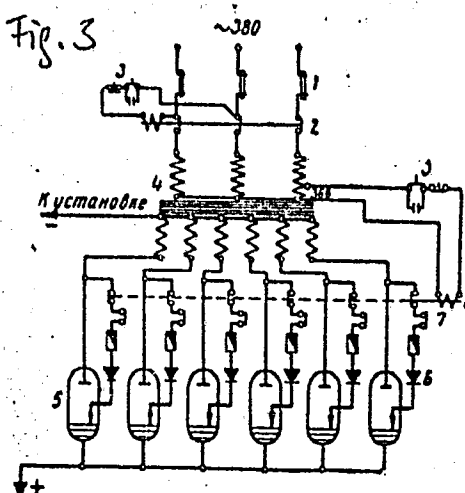
Card 3/4

Gas electric cutting of metal plates

Figure 3:

Six-phase single-cycle circuit of ignitron rectifier; 1 - fuse; 2 - magnetic starter; 3 - push-button set; 4 - transformer 5 - ignitrons; 6 - selenium rectifier; 7 - hydrorelay contacts; 8 - intermediate relay.

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A006/A101



Card 4/4

BYKHOVSKIY, D.G., kand. tekhn. nauk; BOGORODSKIY, Yu.A., inzh.;
ROGOV, V.D., inzh.

Hand operated gas electric cutting torch. Sudostroenie 30
no.11:49-52 N '64. (MIRA 18:3)

ACC NR: AR6029333

SOURCE CODE: UR/0264/66/000/005/B039/B039

AUTHOR: Bogorodskiy, Yu. L.

TITLE: FM-signal limiting

SOURCE: Ref. zh. Radiotekhnika i elektrosvyaz', Abs. 5B287

REF SOURCE: Tr. Vses. n.-i. in-ta magnitn. zapisi i tekhnol. radioveshch. i televiz.,
vyp. 3(13), 1965, 41-55

TOPIC TAGS: FM signal, ^{modulation,} signal ~~limiter~~, FM receiver

ABSTRACT: The limiter in question comprises several stages loaded by resonant circuits shunted by diodes. A circuit is suggested and investigated which ensures a stable passband in a wide dynamic range of input signals. The effectiveness of using rejector circuits in each stage of the limiter is demonstrated.
A. K. [Translation of abstract]

SUB CODE: 09

Card 1/1

UDC: 621.374.34

BOGOROV, G.V.

Boring the earth's crust on the ocean bottom. Okeanologia 2 no.1:
190-191 '62. (MIRA 15:2)

(Mohole project)

IL'IN, A.V.; BOGOROV, G.V.

Recent photographs of the bottom of the Atlantic Ocean.
Okeanologiya 3 no.2:346-348 '63. (MIRA 16:4)
(Atlantic Ocean--Ocean bottom) (Photography, Submarine)

IL'IN, A.V.; BOGOROV, G.V.

New data on the bottom geomorphology of the abyssal Nares plain.
Dokl. AN SSSR 148 no.6:1392-1393 F '63. (MIRA 16:3)

1. Akusticheskiy institut AN SSSR. Predstavleno akademikom D. I.
Shcherbakovym.

(Atlantic Ocean—Ocean bottom)

PROCESSIES AND PROPERTIES INDEX																									
1ST AND 2ND QUANT													3RD AND 4TH QUANT												
<p>BOGDOROV, I. I.</p> <p>CA</p> <p>11E</p> <p>Nutrition of pregnant women. I. I. Bogorov (Lenin-grad Gynecol. Research Inst.). <i>Fel'dsher i Akusherka</i> 1945, No. 9, 36-7.—Dietary requirements of pregnant women are discussed with emphasis on an adequate supply of vitamins A, B, and C. G. M. Kosolapod</p>																									
<p>ASA-ILA METALLURGICAL LITERATURE CLASSIFICATION</p>																									
FROM SYMBIOTIC													FROM SYMBIOTIC												
SYMBOLS													SYMBOLS												

NIKOLAYEV, A.N.; BOGOROV, I.I., professor, zaveduyushchiy; SHUTOVA, N.T., professor, direktor.

Role of consultation stations for women in the prevention of stillbirth.
Vop.pediat. 21 no.3:45-50 My-Je '53. (MLRA 6:7)

1. Akushersko-ginekologicheskaya klinika Leningradskogo gosudarstvennogo pediatricheskogo meditsinskogo instituta (for Nikolayev and Bogorov).
2. Leningradskiy gosudarstvennyy pediatricheskiy meditsinskiy institut (for Shutova). (Stillbirth) (Obstetrics)

BOGOROV, I.I.

FIGURNOV, K.M., professor, redaktor; MANDEL'SHTAM, A.E., professor, zasluzhennyy deyatel' nauk, redaktor; ~~BOGOROV, I.I.~~, professor, redaktor; PETROV-MASIAKOV, M.A., professor, redaktor; MAKAROV, R.R., dotsent, redaktor; TUMANOVA, Ye.S., dotsent, redaktor; RUDAKOV, A.V., redaktor; KHARASH, G.A., tekhnicheskii redaktor

[Problems in the neurohumoral regulation of physiological and pathological processes of the sexual functions in women] Voprosy neuro-gumoral'noi regulatsii fiziologicheskikh i patologicheskikh protsessov zhenskoi polovoi sfery. [Leningrad] Gos. izd-vo med. lit-ry, Leningradskoe otd-nie, 1956. 146 p. (MLRA 10:3)

1. Chlen-korrespondent AMN SSSR (for Figurnov)
(NERVOUS SYSTEM) (GENITOURINARY ORGANS--DISEASES)
(HORMONES, SEX)

BOGOROV, Isay Isaakovich

[Women's hygiene] Gigena zhenskikh. Izd.3., ispr. i dop.
Leningrad, Ob-vo po raspr. polit. i nauchn. znani RSFSR, 1960. 65 p.
(MIRA 14:11)

(WOMEN--HEALTH AND HYGIENE)

BOGOROV, Isay Isaakovich

[Pediatric gynecology] Ginekologiya detskogo vozrasta.
Leningrad, Medgiz, 1960. 266 p. (MIRA 14:1)
(GYNECOLOGY)

BOGOROV, Isay Isaakovich, prof.; VOROB'YEV, G.S., red. izd-va;
GURDZHIYEVA, A.M., tekhn. red.

[Female hygiene]Gigiena zhenshchiny. Izd.4., ispr. i dop.
Leningrad, Ob-vo po raspr. polit. i nauchn. znaniy RSFSR,
1962. 66 p. (MIRA 15:9)
(WOMEN—HEALTH AND HYGIENE)

BELYAYEV, Ye.I., prof. [deceased]; BADIYUK, Ye.Ye.; BOGOROV, I.I.,
prof.; BUBLICHENKO, L.I., prof. [deceased]; IL'IN, I.V.,
dots.; KEYLIN, S.L., prof.; MAZHBITIS, A.M., prof.;
MALININ, A.I., zasl. deyatel' Kaz.SSR, prof.; MOSHKOV, B.N.,
prof.; NIKOLAYEV, A.P., prof.; PERSIANINOV, L.S., prof.;
POKROVSKIY, V.A., prof.; POLYAKOVA, G.P., kand. med. nauk;
RAFAL'KES, S.B., dots.; KHASKIN, S.G., prof.; SHTERN, I.A.,
prof.

[Multivolume manual on obstetrics and gynecology] Mnogo-
tomnoe rukovodstvo po akusherstvu i ginekologii. Moskva,
Meditsina. Vol.3. Book 2. [Pathology of the labor and post-
natal period. Physiology and pathology of the newborn infant]
Patologiya rodov i poslerodovogo perioda. Fiziologiya i pa-
tologiya novorozhdenного. Pt.1. [Pathology of labor] Patolo-
giya rodov. 1964. 895 p. (MIRA 17:7)

1. Chlen-korrespondent AMN SSSR (for Persianinov). 2. Deystvi-
tel'nyy chlen AMN SSSR (for Nikolayev).

BOGOROV, L.V.

Methods of concentrating phytoplankton samples. Gidrobiol.
zhur. 1 no.4:71-72 '65. (MIRA 18:10)

1. Moskovskiy gosudarstvennyy universitet.

ZENKEVICH, L.A.; BOGOROV, V.G.; SHTOKMAN, V.B.

Semen Vladimirovich Bruevich; on the fiftieth anniversary of
his scientific activity. Okeanologia 5 no.5:931-932 '65.
(MIRA 18:11)

BOGOROV, V. G.

"The Biological Seasons in the Plankton of the Seas on Various Latitudes,"
Dokl. AN SSSR, 19, No.8, 1938

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"Diurnal Vertical Migration of Zooplankton in Arctic Seas," Dokl. AN SSSR,
40, No.4, 1943

Lab. Oceanology

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"Distribution of Brackwater Planktonic Fauna in Siberian Polar Seas," Dokl.
AN SSSR, 444 No.5, 1944

BOGACHEV, V. G.

BOGACHEV, V. G. AND SMIRNOV, P. P.

Okeanograficheskie issledovaniia Akademii Nauk.

(In Akademiia Nauk SSSR. Vsesoiuznyi komitet po proveden-
iiu 220-letia Akademii Nauk. Geologo-geograficheskie
nauki. Moskva, 1945. p. 85-92)

DLC: A526.A69A28

SO: LC, Soviet Geography, Part I, 1951, Uncl.

BOGOROV, V.G.

FA 50T79

USSR/Oceanology

Jan 1946

Marine Biology

"Diurnal Vertical Migration of Zooplankton in Polar Seas," V. G. Bogorov, 8 pp

"Trudy Instituta Okeanol" Vol I

Plankton make daily vertical migrations, sinking to depths during day and ascending to surface at night. Polar conditions provided ideal laboratory for support of theory that light is factor determining this migration. Observations during 24-hour daylight summer demonstrated that migration does not occur when light remains constant. Migration resumes during polar autumn.

LC

50T79

BOGOROV, V.

"Vertical Distribution of Zooplankton and the Vertical Distribution of Ocean Waters",
Tr. In-ta okeanologii [Transactions of the Institute of Oceanography], No 2, p 43, 1948.

BOGOROV V. [C]

15116

USSR/Biology - Fauna, Sea
Oceanography

May/Jun 49

"Review of Professor L. A. Zenkevich's Book,
'Fauna of the Seas and Their Biological Produc-
tivity,' V. Bogorov, 2 1/2 pp

"Zool Zhur" No 3

Reviews favorably subject book, which is Vol. II of
series, "Seas of the USSR." Work is a combination
of Bogorov's own study and that of many impor-
tant Soviet scientists. Covers general character-
istics of the sea, history of the study, physico-
geographical, hydrological, hydrochemical, and
geological characteristics, flora, fauna, problem
15116

USSR/Biology - Fauna, Sea (Contd) May/Jun 49

of genesis, and zoogeographical characteristics
of many seas of the USSR. Vol III will cover
fauna of far northern seas.

15116

BOGOROV, V. G. (Prof)

USSR/Chemistry, Hydrology - Fisheries, Jul 51
Chemicals

"Water," Prof V. G. Bogorov, Laureate of Stalin Prize

"Nauka i Zhizn'" Vol XVIII, No 7, pp 14-16

In addn to the existing huge Shcherbakov Sea /Rybnsk reservoir/, other artificial int seas-- the Kuybyshev (500 sq km), Stalingrad (600 sq km) and Tsyml'yansk reservoirs--will be created in the near future. On the basis of product value, the USSR fishing industry is the 1st in the world: 250 species of fish are caught in the

19979

USSR/Chemistry, Hydrology - Fisheries, Jul 51
Chemicals (Contd)

USSR as compared with 121 in the US and 36 in England. Large chem combines have been built in areas where salt water which has been concd by evapn is available. At Kara-Bogaz-Gol (Caspian Sea), mirabilite (Glauber salt) is produced on an extensive scale. It serves for the manuf of soda and other products.

19979

BOGOROV, VENYAMIN GRIGOR'YEVICH

Science

Animal life of seas and oceans and its economic significance; Moskva, Gos. izdvo
geogr. lit-ry, 1952.

9. Monthly List of Russian Accessions, Library of Congress, October 1953² Unclassified.

1. BOGOROV, V. G.
2. USSR (600)
4. Marine Fauna
7. Deeps of the ocean. Geog. v shkole no 6, 1952.

9. Monthly List of Russian Accessions, Library of Congress, March 1953, Unclassified.

BOGOROV, V. G.

"Life in the Seas," Zool. zhur., 31, No.1, 1952. Reviewed by Ye. N. Pavlovskiy

1. BOGOROV, V. G., Prof.
2. USSR (600)
4. Karelin, D. B.
7. - Seas of our country. D. Karelin. Reviewed by Prof. V. G. Bogorov. Vokrug sveta No. 3, 1953.

9. Monthly List of Russian Accessions, Library of Congress, June 1953, Uncl.

BOGOROV, V. G. (reporter)

258T65

USSR/Geography - Scientist, Obituary May/Jun 53

"Academician Petr Petrovich Shirshov (deceased),"
① V. G. Bogorov (reporter)

Iz Ak Nauk SSSR, Ser Geog, No 3, pp 69-70

Reports obituary of Acad P. P. Shirshov (25 Dec 1905 -
17 Feb 1953), who was well known for his polar inves-
tigations, hydrobiology, oceanography, and state ac-
tivities.

258T65

SUSLOV, B.N.; BOGOROV, V.G., professor, redaktor; KADER, Ya.M., redaktor;
MEZHERITSKAYA, N.F., tekhnicheskiy redaktor.

[Water and its use] Voda i ee primeneniye. Pod red. V.G.Bogorova.
Moskva, Voennoe izd-vo Ministerstva oborony SSSR, 1954, 104 p.
[Microfilm] (MLRA 7:11)
(Water)

BOGOROV, Veniamin Grigor'yevich; MAMBYEVA, O., redaktor; MIKHAYLOVSKAYA,
N., tekhnicheskiiy redaktor

[Life of the sea] Zhizn' moria. [Moskva] Izd-vo TsK VLSM "Molo-
daia gvardiia," 1954. 299 p. (MLRA 8:6)
(Marine biology)

BOGOROV, V. G.

USSR/Geography - Oceanography

Card 1/1 : Pub. 77 - 7/22

Authors : Bogorov, V. G., doctor of biological sciences, professor,
~~laureate of Stalin's premium~~

Title : Wonders of the deep sea

Periodical : Nauka i Zhizn' 8, 14-16, Aug 1954

Abstract : An expedition of the Soviet cruiser "Vityaz'" to the Pacific Ocean for the purpose of studying deep sea wonders of the so-called Kurilo-Kamchatka depression is described. Various illustrations of the expedition and the equipment used are shown and described.

Institution :

Submitted :

BOGOROV, V.G.

Petr Petrovich Shirshov as a scholar and administrator in science.
Trudy Inst. okean. no.9:3-4 '54. (MLRA 8:6)
(Shirshov, Petr Petrovich, 1905-1953)

BOGOROV, V.G., laureat Stalinskoy premii, professor; DOBROVOL'SKIY, A.D.,
doktor geograficheskikh nauk, professor, redaktor; KAZAKOVA, V.V.,
tekhnicheskii redaktor.

[The ocean] Okean. Moskva, Voennoe izd-vo Ministerstva oborony
Soyuz SSR. 1955. 139 p. (MIRA 8:4)
(Ocean)

BOGOROV, V.G.

ASIANOVA, N.Ye.; BOGOROV, V.G.; ZUSSER, S.G.; KLENOVA, M.V.; STAROSTIN, A.D.

Scientific and technical research of I.I. Mesiatsev. Trudy
Gidrobiol. ob-va no. 6: 17-22 '55. (MIRA 8:9)
(Mesiatsev, Ivan Illarionovich, 1885-1940)

BOGOROV, V.G., professor

"Vityaz'" in the Pacific Ocean. Vokrug sveta no.8:7-11 Ag'55.
(MIRA 8:12)

(Pacific Ocean--Deep-sea deposits) (Pacific Ocean--Marine
Biology)

USSR/ Biology - Hydrobiology

Card 1/1 Pub. 22 - 48/53

Authors : Bogorov, V. G., and Vinogradov, M. Ye.

Title : ~~The zooplankton of the northwestern part of the Pacific Ocean~~
The zooplankton of the northwestern part of the Pacific Ocean

Periodical : Dok. AN SSSR 102/4, 835-838, Jun 1, 1955

Abstract : Hydrobiological data are presented on the zooplankton of the northwestern part of the Pacific Ocean in the region of the Kuril Islands. Eight references: 2 English and 6 USSR (1938-1955). Diagrams,

Institution : Acad. of Sc., USSR, Inst. of Oceanology

Presented by : Academician A. A. Grigoryev, March 14, 1955

BOGOROV, V.G.; BIKLEKISHV, K.V.

Productive capacity of phytoplankton in the northwestern regions
of the Pacific Ocean. Dokl. An SSSR 104 no.1:141-143 S '55.

(MLRA 9:2)

1. Institut okeanologii Akademii nauk SSSR. Predstavlene akademikom
A.A. Grigor'yevym.

(Pacific Ocean--Plankton)